

Inventor  
Search

11/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2003 Thomson Derwent. All rts. reserv.

015087994

WPI Acc No: 2003-148512/200314

XRAM Acc No: C03-038386

XRPX Acc No: N03-117309

**Diagnosis of bone disease e.g. bone loss associated with osteoporosis by using mathematical function**

Patent Assignee: ARNAUD C (ARNA-I); LANG P (LANG-I); IMAGING THERAPEUTICS (IMAG-N)

Inventor: ARNAUD C; **LANG P**

Number of Countries: 093 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200296284	A1	20021205	WO 2002US17024	A	20020528	200314 B
US 20030015208	A1	20030123	US 2001293489	P	20010525	200314
			US 2001293898	P	20010525	
			US 2002157745	A	20020528	

Priority Applications (No Type Date): US 2001293898 P 20010525; US 2001293489 P 20010525; US 2002157745 A 20020528

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200296284 A1 E 14 A61B-005/00

Designated States (National): AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CU CZ DE DK EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20030015208 A1 A61B-010/00 Provisional application US 2001293489  
Provisional application US 2001293898

Abstract (Basic): WO 200296284 A1

NOVELTY - Diagnosis of bone disease involves mathematical function to relate:

(1) The level of at least one biomarker with a numerical value relating to at least one imaging descriptors; and

(2) Comparing the test value with a control value.

The test value differs from the control value by an amount, which is indicative of bone disease.

DETAILED DESCRIPTION - Diagnosis of bone disease involves mathematical function to relate:

(1) The level of at least one biomarker with a numerical value relating to at least one imaging descriptors; and

(2) Comparing the test value with a control value.

The test value differs from the control value by an amount, which is indicative of bone disease. The imaging descriptor comprises predetermined features from images defining bone disease to obtain test value.

ACTIVITY - Osteopathic; Antiarthritic; Cytostatic; Antiinflammatory.

MECHANISM OF ACTION - None given.

USE - For diagnose of bone disease such as bone loss associated with osteoporosis, arthritis, Paget's disease and periodontal disease

(claimed), osteopenia.

ADVANTAGE - The method provides improved and specific diagnosis of diseases and provides for faster determination on the treatment type and treatment efficacy. The method is sensitive and accurate thus allowing a practitioner to diagnose bone related disease promptly and follows and assesses with greater speed and efficiency the treatment of these bone diseases. The method provides for early diagnosis of diseases. The method mathematically combine the information provided by imaging tests with the information provided by biomarkers to provide an index value used in diagnosis of disease.

pp; 14 DwgNo 0/0

Title Terms: DIAGNOSE; BONE; DISEASE; BONE; LOSS; ASSOCIATE; OSTEOPOROSIS; MATHEMATICAL; FUNCTION

Derwent Class: B04; D22; P31

International Patent Class (Main): A61B-005/00 ; A61B-010/00

International Patent Class (Additional): A61B-005/05 ; A61B-006/00 ; G06F-017/00

File Segment: CPI; EngPI

11/5/2 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

015043156 \*\*Image available\*\*

WPI Acc No: 2003-103672/200309

XRAM Acc No: C03-026330

XRPX Acc No: N03-082692

Provision of articular replacement material involves producing articular replacement material of selected size, curvature and/or thickness

Patent Assignee: IMAGING THERAPEUTICS (IMAG-N)

Inventor: LANG P ; LINDER B; STEINES D

Number of Countries: 100 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200296268	A2	20021205	WO 2002US16945	A	20020528	200309 B

Priority Applications (No Type Date): US 2002380695 P 20020514; US

2001293488 P 20010525; US 2002363527 P 20020312; US 2002380692 P 20020514

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 200296268	A2	E	72	A61B-000/00	
--------------	----	---	----	-------------	--

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

Abstract (Basic): WO 200296268 A2

NOVELTY - An articular replacement material is provided by producing articular replacement material of selected size, curvature and/or thickness.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) A method of:

(a) making cartilage repair material comprising measuring the

dimensions of the intended implantation site or the dimensions of the area surrounding the intended implantation site; and providing **cartilage** replacement material that conforms to the measurements;

(b) repairing a **cartilage** in a subject comprising implanting **cartilage** repair material prepared;

(c) determining the curvature of an articular surface comprising intraoperatively measuring the curvature of the articular surface using a mechanical probe;

(2) A partial articular prosthesis comprising a first component having a **cartilage** replacement material and a second component having metals, where the second component has a curvature similar to subchondral bone and the prosthesis comprises less than 80% of the articular surface; and

(3) An articular surface repair system comprising **cartilage** replacement material having a curvature similar to surrounding or adjacent **cartilage**; and non-biological material(s), where the articular surface repair system comprises a portion of the articular surface equal to or smaller than the weight-bearing surface.

USE - For providing articular replacement material.

ADVANTAGE - The invention enhances the efficacy and comfort level for the patient following the repair procedure. It eliminates the need for a surgeon to measure the defect to be repaired intraoperatively.

pp; 72 DwgNo 1/9

Title Terms: PROVISION; ARTICULAR; REPLACE; MATERIAL; PRODUCE; ARTICULAR;

REPLACE; MATERIAL; SELECT; SIZE; CURVE; THICK

Derwent Class: B04; B07; D16; D22; P31

International Patent Class (Main): **A61B-000/00**

File Segment: CPI; EngPI

11/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014584130 \*\*Image available\*\*

WPI Acc No: 2002-404834/200243

Related WPI Acc No: 2002-404787

XRPX Acc No: N02-317809

**Digital image assessing method for extracting tissue from medical image, involves determining boundary value to boundary element between two pixels being evaluated**

Patent Assignee: UNIV LELAND STANFORD JUNIOR (STRD ); LANG P (LANG-I);  
STEINES D (STEI-I)

Inventor: **LANG P** ; STEINES D

Number of Countries: 097 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200223483	A2	20020321	WO 2001US42155	A	20010914	200243 B
AU 200196873	A	20020326	AU 200196873	A	20010914	200251
US 20020147392	A1	20021010	US 2000232637	A	20000914	200269
			US 2000232639	A	20000914	
			US 2001953531	A	20010914	

Priority Applications (No Type Date): US 2000232639 P 20000914; US

2000232637 P 20000914; US 2001953531 A 20010914

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200223483 A2 E 29 G06T-011/00  
 Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
 CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
 PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW  
 Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
 IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW  
 AU 200196873 A G06T-011/00 Based on patent WO 200223483  
 US 20020147392 A1 A61B-005/05 Provisional application US 2000232637  
 Provisional application US 2000232639

Abstract (Basic): WO 200223483 A2

NOVELTY - A boundary element between two pixels evaluated for assigning specific image component, is selected. A potential boundary value for the specific boundary element is determined based on a gradient boundary value and a location boundary value depending on relative locations of the boundary and a reference elements. Another potential boundary value is determined for another boundary element.

USE - For extracting tissues from medical images, to diagnose osteoarthritis and to monitor disease progressions and **cartilage** loss.

ADVANTAGE - Extracts **cartilage** from medical images accurately and reliably. Improves diagnostic capabilities of **cartilage** quantification methods for assessment of arthritis. Facilitates the segmentation process for the user, by reducing the amount of time necessary to segment **cartilage** from the MR or other medical images.

DESCRIPTION OF DRAWING(S) - The figure shows the distance between intercartilage surface and outer **cartilage** surface.

pp; 29 DwgNo 2/4

Title Terms: DIGITAL; IMAGE; ASSESS; METHOD; EXTRACT; TISSUE; MEDICAL;  
 IMAGE; DETERMINE; BOUNDARY; VALUE; BOUNDARY; ELEMENT; TWO; PIXEL;  
 EVALUATE

Derwent Class: P31; S05; T01

International Patent Class (Main): A61B-005/05 ; G06T-011/00

File Segment: EPI; EngPI

11/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014584083 \*\*Image available\*\*

WPI Acc No: 2002-404787/200243

Related WPI Acc No: 2002-404834

XRFX Acc No: N02-317776

**Cartilage damage assessing method in knee osteoarthritis, involves determining at least one margin between damaged or diseased cartilage and normal cartilage obtained from three-dimensional map**

Patent Assignee: UNIV LELAND STANFORD JUNIOR (STRD ); LANG P (LANG-I);  
 STEINES D (STEI-I)

Inventor: **LANG P** ; STEINES D

Number of Countries: 097 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200222013	A1	20020321	WO 2001US28679	A	20010914	200243 B
AU 200190887	A	20020326	AU 200190887	A	20010914	200251
US 20020177770	A1	20021128	US 2000232637	A	20000914	200281

US 2000232639 A 20000914  
US 2001953373 A 20010914

Priority Applications (No Type Date): US 2000232639 P 20000914; US  
2000232637 P 20000914; US 2001953373 A 20010914

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200222013 A1 E 101 A61B-005/055

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200190887 A A61B-005/055 Based on patent WO 200222013

US 2002017770 A1 A61B-005/05 Provisional application US 2000232637  
Provisional application US 2000232639

Abstract (Basic): WO 200222013 A1

NOVELTY - A three-dimensional map of **cartilage** of joint ,  
determining thickness or biochemical contents or relaxation time of  
both normal and damaged or diseased **cartilage** , is obtained. At least  
one margin between damaged or diseased **cartilage** and normal  
**cartilage** is determined.

USE - For assessing **cartilage** disease or damage in joints for  
knee osteoarthritis (OA).

ADVANTAGE - Condition of **cartilage** damage or disease is  
identified for treatment with high efficiency and reliability.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic  
representation of the **cartilage** damage assessment .

pp; 101 DwgNo 1/24

Title Terms: **CARTILAGE** ; DAMAGE; ASSESS; METHOD; KNEE; OSTEOARTHRITIS;  
DETERMINE; ONE; MARGIN; DAMAGE; DISEASE; **CARTILAGE** ; NORMAL; **CARTILAGE**  
; OBTAIN; THREE; DIMENSION; MAP

Derwent Class: P31; S05

International Patent Class (Main): A61B-005/05 ; A61B-005/055

International Patent Class (Additional): A61B-005/103

File Segment: EPI; EngPI

11/5/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

014551233 \*\*Image available\*\*

WPI Acc No: 2002-371936/200240

XRPX Acc No: N02-290672

Osteoarthritis treatment method involves evaluating image including  
normal and diseased cartilage tissue electronically to obtain  
biomedical and dimensional data of cartilage to select therapy

Patent Assignee: UNIV LELAND STANFORD JUNIOR (STRD )

Inventor: ALEXANDER E J ; ANDRIACCHI T P ; LANG P ; STEINES D

Number of Countries: 097 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200222014	A1	20020321	WO 2001US28680	A	20010914	200240 B
AU 200190888	A	20020326	AU 200190888	A	20010914	200251

Priority Applications (No Type Date): US 2000662224 A 20000914

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200222014 A1 E 104 A61B-005/055

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA  
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ  
PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW  
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200190888 A A61B-005/055 Based on patent WO 200222014

Abstract (Basic): WO 200222014 A1

NOVELTY - An MRI image including both normal and diseased **cartilage** tissue, is obtained and electronically evaluated to obtain information such as volume, area, thickness, curvature, geometry, biochemical contents, signal intensity or relaxation time of the normal or diseased tissue. A therapy is selected based on the evaluated information.

USE - For diagnosing osteoarthritis using magnetic resonance imaging (MRI) technique for selecting **cartilage** transplant, **cartilage** implant, **cartilage** graft, replacement, scaffolds, auto, allo and xeno transplants, osteochondral allo and autografting, stem cell based repair and transfer, femoral or tibial osteotomy, etc.

ADVANTAGE - By determining the relationship between movement pattern and degeneration pattern, the degeneration cause can be determined, so treatment can be prescribed accordingly to minimize further degeneration or inflammation of **cartilages** and **joints** with easy visual identification of actual or potential **cartilage** defects. Since the images are evaluated by mathematical quantification, real measurements such as **cartilage** thickness, volume can be taken and compared so an accurate tracking of the progression of defect or continued tracking of healthy **cartilage** is achieved which aids to provide the correct treatment. The monitoring and evaluation of remedial actions as well as possible treatment prescriptions is also enabled. The **cartilage** defects are located precisely relative to the changing load bearing areas of the knee **joint** during daily activities with the study of load bearing of articular **cartilage** during movement, which further ensures accurate therapy selection.

DESCRIPTION OF DRAWING(S) - The figure shows the overview schematic of the **cartilage** defect assessment system.

pp; 104 DwgNo 1/23

Title Terms: OSTEOARTHRITIS; TREAT; METHOD; EVALUATE; IMAGE; NORMAL;

DISEASE; **CARTILAGE** ; TISSUE; ELECTRONIC; OBTAIN; BIOMEDICAL; DIMENSION;  
DATA; **CARTILAGE** ; SELECT; THERAPEUTIC

Derwent Class: P31; S05

International Patent Class (Main): A61B-005/055

International Patent Class (Additional): A61B-005/103

File Segment: EPI; EngPI

11/5/6 (Item 6 from file: 350)

DIALOG(R) File 350:Derwent WPIX

(c) 2003 Thomson Derwent. All rts. reserv.

013342575 \*\*Image available\*\*

WPI Acc No: 2000-514514/200046

XRPX Acc No: N00-380286

**Human knee joint condition assessment, comprises determining relationship between movement pattern and cartilage degeneration pattern of knee joint by comparing them**

Patent Assignee: UNIV STANFORD (STRD ); ALEXANDER E J (ALEX-I); ANDRIACCHI T P (ANDR-I); LANG P (LANG-I); NAPEL S A (NAPE-I)

Inventor: **ALEXANDER E J ; ANDRIACCHI T P ; LANG P ; NAPEL S A**

Number of Countries: 091 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200035346	A2	20000622	WO 99US30265	A	19991216	200046 B
AU 200020566	A	20000703	AU 200020566	A	19991216	200046
EP 1139872	A2	20011010	EP 99964291	A	19991216	200167
			WO 99US30265	A	19991216	
US 20020087274	A1	20020704	US 98112989	A	19981216	200247
			WO 99US30265	A	19991216	
			US 2001882363	A	20010615	
JP 2002532126	W	20021002	WO 99US30265	A	19991216	200279
			JP 2000587668	A	19991216	

Priority Applications (No Type Date): US 98112989 P 19981216; US 2001882363 A 20010615

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200035346 A2 E 117 A61B-005/11

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

AU 200020566 A A61B-005/11 Based on patent WO 200035346

EP 1139872 A2 E A61B-005/11 Based on patent WO 200035346

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

US 20020087274 A1 H05G-001/00 Provisional application US 98112989  
Cont of application WO 99US30265

JP 2002532126 W 144 A61B-005/055 Based on patent WO 200035346

Abstract (Basic): WO 200035346 A2

NOVELTY - The movement pattern of a knee joint and cartilage degeneration pattern of the joint are compared and the relationship between both the patterns is determined. The movement pattern is obtained over time by correlating movement of external markers placed on the skin overlaying the accompanying bones. The cartilage degeneration pattern is obtained by the MRI technique.

DETAILED DESCRIPTION - At least three external markers are placed on the skin overlaying each bone of either side of the joint being assessed. The joint is electronically recorded by two or more video cameras. The movement pattern of the joint is then estimated by mathematically correlating movement patterns of the other humans with similar characteristics such as age, gender, height, weight, stride length and bone length. The movement pattern include walking, running, stair climbing, stepping on/off of a platform or jumping.

INDEPENDENT CLAIMS are also included for the following:

(a) degenerative joint condition treatment monitoring;

*the Patent*

- (b) **cartilage** degeneration rate assessment;
- (c) **joint cartilage** condition assessing system;
- (d) **cartilage** condition assessing system;
- (e) biochemical map provision method for **joint cartilage** ; and
- (f) a biochemical map of **joint cartilage** .

USE - For assessing the condition of human **joints** , for detecting osteoarthritis.

ADVANTAGE - A relationship between the movement pattern and **cartilage** degeneration pattern is determined. Suitable and effective therapy can be prescribed in case the movement pattern adversely affects degeneration pattern. Adverse effects such as further degeneration or inflammation are reliably avoided.

DESCRIPTION OF DRAWING(S) - The figure shows a schematic representation of knee **joint** assessment.

pp; 117 DwgNo 1/23

Title Terms: HUMAN; KNEE; **JOINT** ; CONDITION; ASSESS; COMPRISE; DETERMINE; RELATED; MOVEMENT; PATTERN; **CARTILAGE** ; DEGENERATE; PATTERN; KNEE; **JOINT** ; COMPARE

Derwent Class: P31; S05; T01

International Patent Class (Main): **A61B-005/055** ; **A61B-005/11** ; H05G-001/00

International Patent Class (Additional): **A61B-008/08** ; G01N-033/48; G01N-033/50; G01R-033/48; G06F-019/00; G06T-001/00; G06T-007/00; G06T-007/20; G06T-007/60; H04N-007/18

File Segment: EPI; EngPI

11/5/7 (Item 7 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

(c) 2003 European Patent Office. All rts. reserv.

01464080

**ASSESSING THE CONDITION OF A JOINT AND DEVISING TREATMENT**  
**BEURTEILUNG DES ZUSTANDES EINES GELENKES UND PLANUNG EINER BEHANDLUNG**  
**VALUATION DE L' TAT D'UNE ARTICULATION ET TRAITEMENT AFF RENT**

PATENT ASSIGNEE:

THE LELAND STANFORD JUNIOR UNIVERSITY, (1724511), 900 Welch Road, Suite 350, Palo Alto, CA 94304-1850, (US), (Applicant designated States: all)

INVENTOR:

**ALEXANDER, Eugene, J.** , 573 Lytton Apt. D, Palo Alto, CA 94301, (US)

**ANDRIACCHI, Thomas, P.** , 12167 Altamont Court, Los Altos Hills, CA 94022 , (US)

**LANG, Philipp** , 36 Fairlawn Lane, Lexington, MA 02420, (US)

**STEINES, Daniel**, 3619 Park Boulevard, Palo Alto, CA 94306, (US)

PATENT (CC, No, Kind, Date):

WO 2002022014 .020321

APPLICATION (CC, No, Date): EP 2001970942 010914; WO 2001US28680 010914

PRIORITY (CC, No, Date): US 662224 000914

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **A61B-005/055** ; **A61B-005/103**

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 021016 A1 International application. (Art. 158(1))

Application: 021016 A1 International application entering European phase

LANGUAGE (Publication,Procedural,Application): English; English; English



11/5/8 (Item 8 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2003 European Patent Office. All rts. reserv.

01464079

**ASSESSING CONDITION OF A JOINT AND CARTILAGE LOSS**  
**BEURTEILUNG DES ZUSTANDES EINES GELENKES UND DES VERLUSTES VON**  
**KNORPELGEWEBE**

**EVALUATION DE L'ETAT D'UNE ARTICULATION ET D'UNE PERTE DE CARTILAGE**

PATENT ASSIGNEE:

LELAND STANFORD JUNIOR UNIVERSITY, (1724512), 900 Welch Road, Suite 350,  
Palo Alto, CA 94304-1850, (US), (Applicant designated States: all)

INVENTOR:

**LANG, Philipp** , 36 Fairlawn Lane, Lexington, MA 02420, (US)  
STEINES, David, 3619 Park Boulevard, Palo Alto, CA 94306, (US)  
PATENT (CC, No, Kind, Date):

WO 2002022013 020321

APPLICATION (CC, No, Date): EP 2001970941 010914; WO 2001US28679 010914

PRIORITY (CC, No, Date): US 232637 P 000914; US 232639 P 000914

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;

LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **A61B-005/055** ; **A61B-005/103**

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 021016 A1 International application. (Art. 158(1))

Application: 021016 A1 International application entering European  
phase

LANGUAGE (Publication,Procedural,Application): English; English; English

11/5/9 (Item 9 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2003 WIPO/Univentio. All rts. reserv.

00898004

**METHODS AND DEVICES FOR ANALYSIS OF X-RAY IMAGES**  
**PROCEDES ET DISPOSITIFS PERMETTANT D'ANALYSER DES IMAGES RADIOLOGIQUES**

Patent Applicant/Assignee:

OSTEONET COM INC, 191 Jefferson Drive, Menlo Park, CA 94025, US, US  
(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

**LANG Philipp** , 36 Fairlawn Lane, Lexington, MA 02420, US, US (Residence)  
, DE (Nationality), (Designated only for: US)

STEINES Daniel, 3619 Park Boulevard, Palo Alto, CA 94306, US, US  
(Residence), DE (Nationality), (Designated only for: US)

Legal Representative:

PASTERNAK Dahna S (et al) (agent), Robins & Pasternak LLP, 545  
Middlefield Road, Suite 180, Menlo Park, CA 94025, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200230283 A2-A3 20020418 (WO 0230283)

Application: WO 2001US32040 20011011 (PCT/WO US0132040)

Priority Application: US 2000240157 20001011

Parent Application/Grant:

Related by Continuation to: US 2000240157 20001011 (CIP)

Designated States: AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CU CZ DE DK EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
UA UG US UZ VN YU ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Main International Patent Class: **A61B-006/00**

Publication Language: English

Filing Language: English

#### English Abstract

The present invention relates to methods and devices for analyzing x-ray images. In particular, devices, methods and algorithms are provided that allow for the accurate and reliable evaluation of bone mineral density and bone structure from x-ray images.

Legal Status (Type, Date, Text)

Publication 20020418 A2 Without international search report and to be republished upon receipt of that report.

Search Rpt 20020620 Late publication of international search report

Republication 20020620 A3 With international search report.

Republication 20020620 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Examination 20021219 Request for preliminary examination prior to end of 19th month from priority date

**11/5/10 (Item 10 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00534043 \*\*Image available\*\*

**ULTRASONIC METHODS AND DEVICES FOR MEASUREMENT OF BODY FAT**

**PROCEDES ET DISPOSITIFS ULTRASONORES DE MESURE DE LA GRAISSE CORPORELLE**

Patent Applicant/Assignee:

LANG Philipp,

MENDLEIN John D,

Inventor(s):

**LANG Philipp ,**

MENDLEIN John D

Patent and Priority Information (Country, Number, Date):

Patent: WO 9965395 A1 19991223

Application: WO 99US13515 19990615 (PCT/WO US9913515)

Priority Application: US 9897772 19980615

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE

ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT

LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT

UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD

RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF

CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: **A61B-008/00**

Publication Language: English

#### English Abstract

The invention provides for methods, compositions, and devices for

measuring adipose tissue, and lean tissue using ultrasonic methods, compositions and devices; particularly methods, compositions, and devices that facilitate placement of ultrasonic probe(s) (200, 210) using external anatomic landmarks such as the umbilicus (220), and methods, compositions, and devices that improve the reproducibility of ultrasonic measurements of object layer thickness.

11/5/11 (Item 11 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00514493 \*\*Image available\*\*

**METHODS AND DEVICES FOR IMPROVING BROADBAND ULTRASONIC ATTENUATION AND SPEED OF SOUND MEASUREMENTS**

**PROCEDES ET DISPOSITIFS AMELIORANT L'ATTENUATION ULTRASONORE EN LARGE BANDE ET LES MESURES DE VITESSE DES SONS**

Patent Applicant/Assignee:

LANG Philipp,  
MENDLEIN John D,

Inventor(s):

LANG Philipp ,  
MENDLEIN John D

Patent and Priority Information (Country, Number, Date):

Patent: WO 9945845 A1 19990916

Application: WO 99US5234 19990309 (PCT/WO US9905234)

Priority Application: US 9836940 19980309; US 9846322 19980323; US 9846324 19980323; US 9871854 19980502

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU

LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA

UG US US US US UZ VN YU ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ

MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ

CF CG CI CM GA GN GW ML MR NE SN TD TG

Main International Patent Class: A61B-008/00

International Patent Class: A61B-010/00

Publication Language: English

**English Abstract**

The invention provides for ultrasonic methods, compositions and devices, particularly methods, compositions devices that provide for reproducible positioning of the ultrasonic transducer (700) over an anatomic region (500, 600, 730) using anatomic landmarks. The invention provides for improved interrogation devices that reproduce position transducers (700) over an interrogation site.

11/5/12 (Item 12 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00477245 \*\*Image available\*\*

**MULTI-SITE ULTRASOUND METHODS AND DEVICES, PARTICULARLY FOR MEASUREMENT OF FLUID REGULATION**

Patent Applicant/Assignee:

MENDLEIN John D,  
LANG Philipp,

Inventor(s):

MENDLEIN John D,  
LANG Philipp

Patent and Priority Information (Country, Number, Date):

Patent: WO 9908597 A1 19990225

Application: WO 98US17240 19980819 (PCT/WO US9817240)

Priority Application: US 97914527 19970819; US 9896857 19980612

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US

US UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT

BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA

GN GW ML MR NE SN TD TG

Main International Patent Class: A61B-008/00

Publication Language: English

English Abstract

The present invention provides for methods, and devices for ultrasound multi-site monitoring especially capillary related interstitial thickness. The invention also includes methods of measuring capillary related interstitial fluid as well as cardiac, vascular, and renal function. Specific devices, particularly probes (520, 600) are provided for such methods.

11/5/13 (Item 13 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2003 WIPO/Univentio. All rts. reserv.

00477244 \*\*Image available\*\*

**MEASUREMENT OF CAPILLARY RELATED INTERSTITIAL FLUID USING ULTRASOUND  
METHODS AND DEVICES**

Patent Applicant/Assignee: .

LANG Philipp,  
MENDLEIN John D,

Inventor(s):

LANG Philipp ,  
MENDLEIN John D

Patent and Priority Information (Country, Number, Date):

Patent: WO 9908596 A1 19990225

Application: WO 98US17238 19980819 (PCT/WO US9817238)

Priority Application: US 97914527 19970819

Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD

MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US

UZ VN YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE

CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN

GW ML MR NE SN TD TG

Main International Patent Class: A61B-008/00

Publication Language: English

English Abstract

The present invention provides for methods and devices for monitoring capillary related interstitial thickness. The invention also includes methods of measuring capillary related interstitial fluid, as well as cardiac, vascular, renal and hepatic function. Specific devices, particularly probes (520, 600, 730), are provided for such methods.

Set	Items	Description
S1	23	E3,E7
S2	4	AU='ALEXANDER EUGENE J'
S3	8	AU='ANDRIACCHI T':AU='ANDRIACCHI THOMAS P'
S4	79	AU='LANG P':AU='LANG P R'
S5	58	AU='LANG PHILIP C':AU='LANG PHILIPPE DR'
S6	9	AU='NAPEL S':AU='NAPEL SANDY A'
S7	166	S1:S6
S8	25	S7 AND (JOINT? ? OR CARTILAG?)
S9	19	S8 AND IC=A61B
S10	19	IDPAT (sorted in duplicate/non-duplicate order)
S11	13	IDPAT (primary/non-duplicate records only)

? show files

File 347:JAPIO Oct 1976-2002/Nov(Updated 030306)

(c) 2003 JPO & JAPIO

File 348:EUROPEAN PATENTS 1978-2003/Mar W03

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20030320,UT=20030313

(c) 2003 WIPO/Univentio

File 350:Derwent WPIX 1963-2003/UD,UM &UP=200318

(c) 2003 Thomson Derwent

File 371:French Patents 1961-2002/BOPI 200209

(c) 2002 INPI. All rts. reserv.